

Figure 1:

1/1

GGT ACC ACT TCT CTC AAT CCA ACT TTC TAA ACA ATG GCT TCT AAA CCT TTC TTG TCT CTT
M A S K P F L S L

61/10

CTT TCT TTG TCT TTG CTT TTG TTC ACC TCT ACT AGT TTG GCT GAC CTG TAC TTC ATT TTG
L S L S L L F T S T S L A D L Y F I L

121/30

GAC AAA TCA GGA AGT GTG CTG CAC CAC TGG AAT GAA ATC TAT TAC TTT GTG GAA CAG TTG
D K S G S V L H H W N E I Y Y F V E Q L

181/50

GCT CAC AAA TTC ATC AGC CCA CAG TTG AGA ATG TCC TTT ATT GTT TTC TCC ACC CGA GGA
A H K F I S P Q L R M S F I V F S T R G

241/70

ACA ACC TTA ATG AAA CTG ACA GAA GAC AGA GAA CAA ATC CGT CAA GGC CTA GAA GAA CTC
T T L M K L T E D R E Q I R Q G L E E L

301/90

CAG AAA GTT CTG CCA GGA GGA GAC ACT TAC ATG CAT GAA GGA TTT GAA AGG GCC AGT GAG
Q K V L P G G D T Y M H E G F E R A S E

361/110

CAG ATT TAT TAT GAA AAC AGA CAA GGG TAC AGG ACA GCC AGC GTC ATC ATT GCT TTG ACT
Q I Y Y E N R Q G Y R T A S V I I A L T

421/130

GAT GGA GAA CTC CAT GAA GAT CTC TTT TTC TAT TCA GAG AGG GAG GCT AAT AGG TCT CGA
D G E L H E D L F F Y S E R E A N R S R

481/150

GAT CTT GGT GCA ATT GTT TAC TGT GTT GGT GTG AAA GAT TTC AAT GAG ACA CAG CTG GCC
D L G A I V Y C V G V K D F N E T Q L A

541/170

CGG ATT GCG GAC AGT AAG GAT CAT GTG TTT CCC GTG AAT GAC GGC TTT CAG GCT CTG CAA
R I A D S K D H V F P V N D G F Q A L Q

601/190

GGC ATC ATC CAC TCA ATT TTG AGC TCT GCT TCC CCA ACC AGC CCT AAG GTC TTC CCT CTC
G I I H S I L S S A S P T S P K V F P L

661/210

AGC CTT GAC AGC ACC CCT CAA GAT GGT AAT GTT GTC GTT GCT TGC CTT GTC CAG GGT TTC
S L D S T P Q D G N V V V A C L V Q G F

721/230

TTC CCT CAG GAG CCA CTC TCT GTT ACC TGG TCT GAA TCT GGA CAG AAT GTT ACC GCC AGA
F P Q E P L S V T W S E S G Q N V T A R

781/250

AAC TTC CCA CCT AGC CAG GAT GCC TCC GGT GAC CTC TAC ACC ACC AGC TCT CAG CTC ACC

PATENT
030905.0004.CIP1

N F P P S Q D A S G D L Y T T S S Q L T
841/270

CTT CCA GCC ACC CAG TGC CCA GAT GGT AAG TCC GTT ACC TGC CAT GTT AAG CAC TAC ACC
L P A T Q C P D G K S V T C H V K H Y T
901/290

AAC TCC AGC CAG GAT GTT ACT GTT CCA TGC CGT GTT CCA CCA CCT CCA CCA TGC TGC CAC
N S S Q D V T V P C R V P P P P C C H
961/310

CCA CGT CTC TCT CTT CAC CGT CCT GCC CTT GAG GAC TTG CTC TTG GGT TCT GAA GCT AAC
P R L S L H R P A L E D L L L G S E A N
1021/330

CTC ACC TGC ACC CTC ACC GGT CTC AGA GAT GCC TCT GGT GCC ACC TTC ACC TGG ACC CCA
L T C T L T G L R D A S G A T F T W T P
1081/350

AGC TCT GGT AAG AGC GCT GTT CAA GGA CCA CCT GAG CGT GAC CTC TGT GGA TGC TAC TCT
S S G K S A V Q G P P E R D L C G C Y S
1141/370

GTT AGC TCT GTT CTT CCT GGT TGT GCC CAG CCT TGG AAC CAC GGT GAG ACC TTC ACC TGC
V S S V L P G C A Q P W N H G E T F T C
1201/390

ACT GCT GCC CAC CCA GAG TTG AAG ACC CCA CTT ACC GCC AAC ATC ACC AAG TCC GGA AAC
T A A H P E L K T P L T A N I T K S G N
1261/410

ACC TTC CGT CCC GAG GTC CAC CTC TTG CCA CCA CCT GCT GAG GAG CTT GCC CTC AAT GAG
T F R P E V H L L P P P S E E L A L N E
1321/430

CTT GTT ACC CTC ACC TGC CTT GCT CGT GGA TTC AGC CCA AAG GAT GTT CTT GTT AGG TGG
L V T L T C L A R G F S P K D V L V R W
1381/450

CTT CAG GGA TCT CAG GAG CTT CCA CGT GAG AAG TAC CTC ACT TGG GCT TCC CGT CAG GAG
L Q G S Q E L P R E K Y L T W A S R Q E
1441/470

CCA AGC CAG GGA ACT ACC ACC TAC GCT GTT ACC AGC ATC CTT CGT GTT GCT GCT GAG GAC
P S Q G T T Y A V T S I L R V A A E D
1501/490

TGG AAG AAG GGT GAG ACC TTC TCC TGC ATG GTT GGT CAC GAG GCC CTT CCA CTT GCC TTC
W K K G E T F S C M V G H E A L P L A F
1561/510

ACC CAG AAG ACC ATT GAT CGT TTG GCT GGA AAG CCA ACC CAC ATC AAT GTT TCT GTT GTC
T Q K T I D R L A G K P T H I N V S V V
1621/530

ATG GCT GAG GCT GAT GGA ACC TGC TAC TAA
1650/538

Figure 2. pGPTV-kan-ocs-ATR-IgA2:

Bgl II

1 CTGGCCGGCGCCAGATCTGGGAAACCTGTGGTGGCATGCACATACAAATGGACGAACGGATAAACCTTTACGCCCTT
81 TTAAATATCCGATTATTCTAATAAACGCTCTTCTCTAGGTTACCGCCAATATATCCTGTCAAACACTGATAGTT
161 AAACTGAAGGCGGGAAACGACAATCTGATCATGAGCGGAGAATTAAGGGAGTCACGTTATGACCCGCCATGACGCCGG

EcoR I

241 ACAAGCCGTTTACGTTGGAAC TGACAGAACCGCAACGTTGAAGGAGCCACTCAGCCGATCTGAATTCACTGCTTAAT
321 GAGATATGCGAGACGCCTATGATCGCATGATATTGCTTCAATTCTGTTGCACGTTGTAACCTGAGCATGTGT
401 AGCTCAGATCCTTACCGCCGGTTCGGTTCTAATGAATATATCACCCGTTACTATCGTATTTTATGAATAATATT
481 CTCCGTTCAATTTACTGATTGATTGACCCACTACTTATATGTACAATATTAAAATGAAAACAATATATTGTGCTGAATAGGT

Sac I Asc I

561 TTATAGCGACATCTATGATAGAGCGCCACAATAACAAACAATTGCGTTTATTATTACAAATCCAATTGAGCTCGCG
641 CGCCAGCTGGACATCATGTTGGATATGAAACAACTATTATTATCTACATGTTAGATGTTATCTGATTATTTTATAC
721 GTAGTCTTCTATTGATGAGGAGTCTAAGGCTATAGAATTATATATCTAAATGATTAATATATATATTATAATAATTAAAC
801 AATAATTAAATATATTATAATTATATATATATTATTTATATTATAATAATTCTACAAATATAATTATTATTC
881 GACGGTATCGGGCAATTGTATTCGACGGTATCGCGATAAGCTCGGGATCCCTGAAAGCGACGTTGGATGTTAACATCT
961 ACAAAATTGCCTTTCTTATCGACCATGTACGTAAGCGCTTACGTTTGGTGGACCCCTTGAGGAAACTGGTAGCTGTTGT
1041 GGGCCTGTGGTCTCAAGATGGATCATTAAATTCCACCTCACCTACGATGGGGGCATCGCACCGGTGAGTAATATTGTA
1121 CGGCTAAGAGCGAATTGGCCTGAGGATCCCTGAAAGCGACGTTGGATGTTAACATCTACAAATTGCCTTTCTTATCG
1201 ACCATGTACGTAAGCGCTTACGTTTGGTGGACCCCTTGAGGAAACTGGTAGCTGTTGGCCTGTTCTCAAGATGG
1281 ATCATTAATTCCACCTTACCTACGATGGGGGCATCGCACCGGTGAGTAATATTGTAAGCGTAAGAGCGAATTGGCC
1361 TGTAGGATCCCTGAAAGCGACGTTGGATGTTAACATCTACAAATTGCCTTTCTTATCGACCATGTACGTAAGCGCTTAC
1441 GTTTTGGTGGACCCCTGAGGAAACTGGTAGCTGTTGGCCTGTTCTCAAGATGGATGTTAACATTTCCACCTTCAC
1521 CTACGATGGGGGCATCGCACCGGTGAGTAATATTGTAAGCGTAAGAGCGAATTGGCCTGAGGATCCCGAGCTGGTC
1601 AATCCCATTGCTTTGAAGCAGCTAACATTGATCTTCTCGATCGAGGGAGATTTCAAATCAGTGCAGACGT
1681 GACGTAAGTATCCGAGTCAGTTTATTCTACTAATTGGCGTTATTCGGCGTAGGACATGGCAACCGGGCC
1761 TGAATTTCGCGGGTATTCTGTTCTATTCCAACCTTCTGATCCGAGCCATTAACGACTTTGAATAGATACGCTGA
1841 CACGCCAAGCCTCGTAGTCAAAAGTGACCAAAACACGCTTACAGCAAGAACGGAATGCGCGTACGCTCGCGGTGAC
1921 GCCATTTCGCCCTTCAGAAATGGATAAAATAGCCTTCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTCA
2001 ATCCAACCTTCTAAACAATGGCTCTAAACCTTCTTCTGCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTCA
2081 TTGGCTGACCTGTACTTCATTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACA
2161 GTTGGCTCACAAATTCTACAGCCCACAGTTGAGAATGTCCTTATTGTTCTCCACCCGAGGAACAACCTTAATGAAAC
2241 TGACAGAAGACAGAGAACAAATCCGTCAAGGCCAGAAGAAACTCCAGAAAGTCTGCCAGGAGGAGACACTTACATGCAT
2321 GAAGGATTGAAAGGGCCAGTGAGCAGATTATTGAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCTTCTTCTT
2401 GACTGATGGAGAACTCCATGAAGATCTCTTCTATTGAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGAATTG
2481 TTTACTGTGTTGGTGTGAAAGATTCAATGAGACACAGCTGGCCGGATTGCGGACAGTAAGGATCATGTGTTCCCGTG
2561 AATGACGGCTTCAGGCTCTGCAAGGCATCATCCACTCAATTGAGCTCTGCTTCCCCAACAGCCCTAAGGTCTTCCC
2641 TCTCAGCCTTGACAGCACCCCTCAAGATGGTAATGTTGCGTTGCTTGCCTTGTCCAGGGTTCTCCCTCAGGAGCCAC

2721 TCTCTGTTACCTGGCTGAATCTGGACAGAATGTTACCGCCAGAAACTTCCCACCTAGCCAGGATGCCCTCGGTGACCTC
2801 TACACCACCAAGCTCTCAGCTCACCCCTCCAGCCACCCAGATGGTAAGTCCGTTACCTGCCATGTTAAGCACTA
2881 CACCAACTCCAGCCAGGATGTTACTGTTCCATGCCGTTCCACCCACCTCCACCATGCTGCCACCCACGTCTCTCTTC
2961 ACCGTCTGCCCTTGAGGACTTGCTCTGGGTTCTGAAGCTAACCTCACCTGCACCCCTCACCGTCTCAGAGATGCCCT
3041 GGTGCCACCTTCACCTGGACCCCAAGCTCTGGTAAGAGCCTGTTCAAGGACCACCTGAGCGTGACCTCTGTGGATGCTA
3121 CTCTGTTAGCTCTGTTCTCCTGGTTGTGCCAGCCTGGAAACCACGGTGAGACCTTCACCTGCACGTGCTGCCACCCAG
3201 AGTTGAAGACCCCCACTTACCGCCAACATACCAAGTCGGAAACACCTTCCGCTCCGAGGTCCACCTTGCACCCACCA
3281 TCTGAGGAGCTTGCCCTCAATGAGCTTGTACCCACCTGCCCTGCTGGATTCAAGCCAAAGGATGTTCTGTTAG
3361 GTGGCTTCAGGGATCTCAGGAGCTTCCACGTGAGAAGTACCTCACCTGGCTTCCGTCAGGAGCCAAGCCAGGAACTA
3441 CCACCTACGCTGTTACAGCATCCTCGTGTGCTGAGGACTGGAAGAAGGGTAGACCTCTCCTGCATGGTTGGT
3521 CACGAGGCCCTTCACTTGCCTCACCCAGAACGACATTGATCGTTGGCTGAAAGCCAACCCACATCAATGTTCTGT
3601 TGTCAATGGCTGAGGCTGATGAAACCTGCTACTAAGATCTGTGAATTCTGCAGCCGGGGATCCACTAGTTCTAGCTAG
3681 AGCGGCCGCCACCGCGTGGCGAATTAAACAGAGGTGGATGGACAGACCCGTTCTACACCGACTGGCGCGGATAGGA
3761 TATTCAGATTGGGATGGGATTGAGCTTAAAGCCGGCGTGAGACCATGCTCAAGGTAGGCAATGTCCTCAGCGTCAGGCC
3841 CGGCATCTATGTCGAGGGCATTGGTGGAGCGCGCTTCGGGATACCGTCTGTTAATGAGACCCGATATGAGGCCCTCA
3921 CTCCGTTGATCTGGAAAGATATTGACGCATTATTAGTATGTTAATTTCAATTGAGCTGCTTGTGAGTCAATCGTGT
4001 CGATCTTATGTAATTGTTACAATTAAATAATTCAAATCAGATTATTGACTGTCATTGTATCAAATCGTGT
4081 GGATATTTTATTATAATTGATGATAATTCACTGGCCGTCGTTTACAACGTCGTACTGGAAAACCCCTGGCGTTAC
4161 CCAACTTAATGCCCTGCAGCACATCCCCCTTCGCCAGCTGGCGCCAAGCTCACGCTGCCAAGCACTCAGGGCG
4241 CAAGGGCTGCTAAAGGAAGCGGAACACGTAGAAAGCCAGTCCGAGAAACGGTGCTGACCCGGATGAATGTCAGCTACT
4321 GGCTATCTGGACAAGGGAAAACGCAAGCGCAAAGAGAAAGCAGGTAGCTGCAGTGGCTTACATGGCAGTAGCTAGACT
4401 GGGCGGTTTATGGACAGCAAGCGAACCGGATTGCCAGCTGGGCGCCCTGGTAAGGTTGGAAAGCCCTGCAAAGTA
4481 AACTGGATGGCTTCTGGAGTTAATGAGCTAACGACATACGTAGAAACCATTATTGCGCGTCAAAAGTCGCTAACGGT
4561 TATGACCCCCCGCGATGACGGGACAAGCGTTTACGTTGAACTGACAGAACGCAACGTTGAAGGAGCCACTCAG
4641 CCGCGGGTTCTGGAGTTAATGAGCTAACGACATACGTAGAAACCATTATTGCGCGTCAAAAGTCGCTAACGGT
4721 TATCAGCTAGCAAATATTCTGTCAAAATGCTCCACTGACGTTCCATAAAATTCCCTCGGTATCCAATTAGAGTCTCA
4801 TATTCACTCTCAATCCAGATCTGGATCGTTGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGG
4881 TGGAGAGGCTATTGGCTATGACTGGGACAACAGACAATGGCTGCTCTGATGCCGCCGTTCCGGCTGTCAGCGCAG
4961 GGGCGCCCGGTTCTTTGTCAAGACCGACCTGTCGGTCCCTGAATGAACTGCAAGGACGAGGAGCGCGGGCTATCGTG
5041 GCTGGCCACGACGGCGTTCTGCGCAGCTGTGCTGACGTTGTCAGTGAAGCGGGAAAGGACTGGCTGCTATTGGCG
5121 AAGTGGCGGGCAGGATCTCTGTCATCTCACCTGCTCTGCCAGAAAGTATCCATCATGGCTGATGCAATGCCCG
5201 CTGCATACGCTTGATCCGGTACCTGCCATTGACCAAGCGAAACATCGCATTGAGCGAGCACGTACTCGGATGGA
5281 AGCCGGTCTGTCGATCAGGATGATCTGGACGAAGAGCATCAGGGCTGCCAGCCAACTGTTGCCAGGCTCAAGG
5361 CGCGCATGCCGACGGCGATGATCTCGTCGTGACCCATGGCGATGCCCTGCTGCCGAATATCATGGTGGAAAATGCCGC
5441 TTTTCTGGATTCATGACTGTTGCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGT
5521 TGAAGAGCTGGCGGAATGGCTGACCGCTTCTCGCTTACGGTATGCCGCTCCGATTGCAAGCGCAGCGCCT
5601 TCTATGCCCTCTGACGAGTTCTGAGCGGGACTCTGAGGATCCCCGATGAGCTAACGCTAGCTATATCATCAATT
5681 ATGTATTACACATAATATGCACTCAGTCTTCACTACGGCAATGTACCGAGCTGATATAATCAGTTATTGAAATATTG

5761 TGAATTAAACTGCATCAATAAATTATGTTTGCCTGGACTATAATACCTGACTTGTATTTATCAATAAATATT
5841 AAACTATATTCTTCAGATGGAATTAATTCACTGCCGTCGTTTACAACGTCGTACTGGAAAACCTGGCGTTA
5921 CCCAACTTAATGCCTTGCAGCACATCCCCCTTCGCCAGCTGGCGTAATAGCGAAGAGGCCGACCGATGCCCTTCC
6001 CAACAGTTGCGCAGCCTGAATGGCGCCGCTCCTTCGCTTCTCCCTTCTGCCACGTCGCCGGCTTCCCC
6081 GTCAAGCTCTAAATCGGGCTCCCTTAGGGTCCGATTTAGTCTTACGGCACCTCGACCCAAAAACTGATTTG
6161 GGTGATGGTACGTAGTGGGCCATGCCCTGATAGACGGTTTCGCCCTTGACGTTGGAGTCCACGTTCTTAATAG
6241 TGGACTCTTGTCCAAACTGGAACAACACTCAACCCATCTCGGCTATTCTTTGATTATAAGGGATTTGCCGATT
6321 CGGAACCACCATCAAACAGGATTTGCCCTGCTGGGCAAACCGACGCGTGGACCGCTGCTGCAACTCTCAGGGCCAGG
6401 CGGTGAAGGGCAATCAGCTGTTGCCGTCTCACTGGTAAAAGAAAACCACCCAGTACATTAAAACGTCCGCAATGT
6481 GTTATTAAGTTGTCTAAGCGTCAATTGTTACACCACAATATCCTGCCACCAGCCAGCCAACAGCTCCCCGACCGGC
6561 AGCTCGGCACAAATCACCCTCGATACAGGCAGCCATCAG

Figure 3. pGPTV-hpt-ocs-35SJ/SC

1 CTGATGGGCTGCCTGTATCGAGTGGTGATTGTGCCAGCTGCCGGTCGGGAGCTGGCTGGCTGGCAGGATA
 81 TATTGTGGTGTAAACAAATTGACGCTTAGACAACCTAATAACACATTGCGGACGTTTAATGTACTGGGTGGTTTC
 161 TTTTCAACCAGTGAGACGGCAACAGCTGATTGCCCTCACCGCCTGGCCCTGAGAGAGTTGCAGCAAGCGTCCACGCTG
 241 GTTTGCCAGCAGGGAAAATCCTGTTGATGGTGGTCCAGGGAAACAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAA
 321 GAGATAGGTTGAGTGGTCCAGGGAAACAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAA
 401 AACCGTCTATCAGGGCGATGGCCACTACGTGAACCATCACCCAAATCAAGTTTTGGGTGAGGTGCCGTAAAGCAC
 481 TAAATCGAACCTAAAGGGAGCCCCGATTAGAGCTTGACGGGAAAGCCGGCAACGTGGCAGAAAGGAAGGGAG
 561 AAAGCGAAAGGAGCGGGCGCATTAGGCTGCGCACTGTTGGGAAGGGCGATCGGTGCGGCTTCGCTATTACGCC
 641 AGCTGGCGAAAGGGGATGTGCTGCAAGCGATTAAGTTGGTAACGCCAGGGTTTCCAGTCACGACGTTGAAAACG
 721 ACGGCCAGTGAATTAAATTCCCATTGAAAGAAATATAGTTAAATATTGATAAAATAACAAGTCAGGTATTATAG
 801 TCCAAGCAAAACATAAATTATTGATGCAAGTTAAATTCAAGAAATATTCAATAACTGATTATATCAGCTGGTACATT
 881 GCCGTAGATGAAAGACTGAGTGCATATTATGTGTAATACATAAAATTGATGATAGCTAGCTTAGCTCATGGGGATC
 961 CCGGTCGGCATCTACTCTATTCCCTTGCCCTCGGACGAGTGCCTGGCGTGGTCCACTATCGCGAGTACTTCTACA
 1041 CAGCCATCGGTCCAGACGGCCGCGCTCTGGGGCGATTGTGTCAGCCGACAGTCCGGCTCCGATCGGACGATTGC
 1121 GTCGCATCGACCCTGCGCCAAGCTGCATCATCGAAATTGCGTCAACCAAGCTCTGATAGAGTGGTCAAGACCAATGC
 1201 GGAGCATATAAGCCGGAGCCGGCGATCTGCAAGCTCGGATGCCCTCGCTCGAAGTAGCGCGTCTGCTGCTCCATA
 1281 CAAGCCAACCACGGCCTCCAGAAGAAGATGTTGGCAGCTCGTATTGGAAATCCCCGAACATCGCCTCGCTCCAGTCAT
 1361 GACCGCTGTTATGCGGCCATTGTCGTCAGGACATTGTTGGAGCCAAATCCGCGTGCACGAGGTGCCGACTTCGGG
 1441 AGTCCTCGGCCAAAGCATCAGCTCATCGAGAGCCTGCGGACGGACGCAGTACGGTGTGTCATCACAGTTGCCAG
 1521 TGATACACATGGGATCAGCAATCGCGCATATGAAATCACGCCATGTAGTGTATTGACCGATTCTGCGGTCCGAATGG
 1601 GCCGAACCGCTCGTGGCTAAGATCGGCCAGCGATCGCATCCATGGCTCCCGACCGCTGCAGAACAGCGGGCA
 1681 GTTCGGTTTCAGGCAGGTCTGCAACGTGACACCCCTGTCACGGGGAGATGCAATAGGTCAAGGCTCTCGCTGAATGCC
 1761 CCAATGTCAAGCACTCCGGAATGGAGCGCGCCGATGCAAAGTGGCATAAACATAACGATCTTGAGAAACCATC
 1841 GGCGCAGCTATTACCCGAGGACATATCCACGCCCTCTACATCGAAGCTGAAAGCACGAGATTCTGCCCTCCGAGA
 1921 GCTGCATCAGGTGGAGACGCTGCAACTTTGATCAGAAACTCTCGACAGACGTCCGGTGAGTTCAAGGCTTTTC
 2001 ATATCTTATTGCCCTCTAGAGTCGAGATCTGGATTGAGAGTGAATATGAGACTCTAATTGGATACCGAGGGAAATT
 2081 GGAACGTCAGTGGAGCATTGACAAGAAATATTGCTAGCTGATAGTGCACCTTAGGCGACTTTGAACGCGAATAAT
 2161 GGTTCTGACGTATGTGCTTAGCTCATTAAACTCCAGAAACCGCGGCTGAGTGGCTCTCAACGTTGCGGTTCTGTC
 2241 GTTCCAAACGTAACCGGCTGTCCCGGTACCGCGGGGTACATCGACTCCCTAATTCTCGCTCATGATCTT
 2321 GATCCCTCGGCCATCAGATCCTGGCGCAAGAAAGCCATCCAGTTACTTGCAGGGCTCCACCTTACCGAGAGGG
 2401 CGCCCCAGCTGGCAATTCCGGTTGCTGTCCATAAAACGCCAGTCTAGCTATGCCATGTAAGCCCACGTCAAG
 2481 CTACCTGCTTCTCTTGCCTGCGTTCCCTGTCAGATAGCCAGTAGCTGACATTCATCGGGGTACGACCCGTT
 2561 TCTGCGGACTGGCTTCTACGTGTTCCGCTTCTAGCAGCCCTGCGCCCTGAGTGCCTGCGGAGCGTGAAGCTTGG
 2641 CGCGCCAGCTGGACATCATGTTGGATATGAAACAACATTATTATCTACATGTTAGATGTTATCTGATTATTTTAT
 2721 ACGTAGTCTCTATTGATGAGGAGTCTAAGGCTATAGAATTATATCTAAATGATTAATATATATTATAATAATT
 2801 ACAATAATTAAATATTATAATTATATATATTATATTATAATAATTCTACAAATATAATTATTATA

2881 TCGACGGTATGGGGCAATTGATTCCGATCCTATCTGTCACTTCATCAAAAGGACAGTAGAAAAGGAAGGTGGCACCTA
2961 CAAATGCCATCATTGCGATAAAGGAAAGGCTATCATTCAAGATGCCCTGCCGACAGTGGTCCAAAGATGGACCCCCAC
3041 CCACGAGGAGCATCGTGGAAAAGAAGACGTTCAACCACGTCTCAAAGCAAGTGGATTGATGTGATATCTCCACTGAC
3121 GTAAGGGATGACGCACAATCCACTATCCTCGCAAGACCCCTCCTATATAAGGAAGTTCATTTGAGAGGAC
3201 ACGCTGAAATCACCAGTCTCTCTACAAGGTACCATGGTGTCTCGTGCACCTGCCTGCTGGCGGTCTCCAGCC
3281 ATCTCCACGAAGAGTCCATATTGGTCCCAGGGAGGTGAATAGTGTGAAAGGTAACTCAGTGTCCATCACGTGCTACTA
3361 CCCACCCACCTCTGTCAACCGGACACCCGGAAGTACTGGTGCCGGCAGGGAGCTAGAGGTGGCTGCATAACCCCTCATCT
3441 CCTCGGAGGGCTACGTCTCCAGCAAATATGCAGGCAGGGTAACCTCACCAACTCCGGAGAACGGCACATTGTGGTG
3521 AACATTGCCAGCTGAGCCAGGATGACTCCGGCGCTACAAGTGTGGCCTGGCATCAATAGCCGAGGCCTGTCCTTGA
3601 TGTCAGCCTGGAGGTCAAGCAGTGGCTGGGCTCTAAATGACACTAAAGTCTACACAGTGGACCTGGCAGAACGGTGA
3681 CCATCAACTGCCCTTCAAGACTGAGAATGCTAAAAGAGGAAGTCCCTGTACAAGCAGATAGGCCGTACCCGTGCTG
3761 GTCATCGACTCCAGTGGTTATGTGAATCCAACTATAAGGAAGAACGCTTGTGATATTCAAGGTACTGCCAGTTACT
3841 GTTCAGCGTTGTGATCAACCAACTCAGGCTAGCGATGCTGGCAGTATCTGCCAGGCTGGGATGATTCAAATAGTA
3921 ATAAGAAGAACGCTGACCTCAAAGTGTAAAGCCGAGCCGAGCTGGTTATGAAGACCTGAGGGCTCAGTGACCTTC
4001 CACTGTGCCCTGGCCCTGAGGTGGCAAACGTGGCAAATTCTGTGCCAGAGCAGTGGAAAAGTGTGACGTGGT
4081 CGTCAACACCTGGGAAGAGGGCCAGCCTTGAGGGCAGGATCTGCTCAACCCCAAGGACAAGGATGGCTCATTCA
4161 GTGTGGTGTACAGGCCCTGAGGAAGGAGGATGCAGGGCCTACCTGTGTGGAGGCCATTGGATGGTCAGCTCAGGAA
4241 GGCTCGCCTATCCAGGCCCTGGCAACTCTTCGTCAATGAGGAGTCCACGATTCCCGCAGCCCCACTGTGGTGAAGGGGT
4321 GGCAGGAAGCTGTGGCCGTGCTCTGCCCTACAACCGTAAGGAAAGCAAAAGCATCAAGTACTGTGTCTGGGAAG
4401 GGGCCAGAACGGCCCTGCCCTGCTGGGACAGCGAGGGTGGTAAGGCCAGTACGAGGCCCTCCCTG
4481 CTGGAGGAGGCCAGGCAACGGCACCTCACTGTCATCCTCAACCAGCTCACAGCCGGACGCCGGCTACTGGTGTCT
4561 GACCAACGGCGATACTCTGGAGGACCACCGTGGAGATCAAGATTATCGAAGGAGAACCAACCTCAAGGTTCCGGGA
4641 ATGTCACGGCTGTGCTGGAGAGACTCTCAAGGCTCTGTCACCTTCATGCAAATTCTCGTACGAGAAATACTGG
4721 TGCAAGTGGATAAACACGGCTGCCAGGCCCTGCCAGCCAAGACGAAGGCCAGCAAGGCCCTCGTACGTGACGA
4801 GAACAGCCGGCTGTCTCCCTGACCCCTGAACCTGGTACCGAGGGCTGATGAGGGCTGGTACTGGTGTGGAGTGAAGCAGG
4881 GCCACTTCTATGGAGAGACTGCAGCCGTCTATGTCAGGGCAGTTGAAGAGAGGAAGGCAGCGGGTCCCGCATGTCAGCCTA
4961 GCGAAGGCAGCGCTGCTCTGATGAGAAGGTGCTAGACTCTGGTTTCGGAGATTGAGAACAAAGCCATTCAAGGATCC
5041 CAGGCTTTTGAGAGTGAATTGTTCTGATCATGGTTTCGACAACTGTCAGTTCAATGCATCAGTTCAATTGCG
5121 CACACACCAGAACCTACTGAGTCGAGTATTATGGCATTGGAAAAGTGTGTTCTGTACCATTTGTTGCTTGTAA
5201 TTTACTGTGTTTTATTGGTTTCGCTATCGAACTGTGAAATGGATGGAGAACAGTTAATGAATGATATGGT
5281 CCTTTGTCATTCTCAAATTATATTGGTTCTTATTGTTGTTGTTGAATTGAAATTATAAGAGATAT
5361 GCAAACATTGGTTGAGTAAAATGTGTCATCGGCTCTAATGACCGAAGTTAATATGAGGAGTAAACACTTG
5441 TAGTTGTCAGGGTATCGATATTAAATTCCGATCCTATCTGTCACCTCATCAAAGGACAGTAGAAAAGGAAGGTGGCAC
5521 CTACAAATGCCATCATTGCGATAAAGGAAAGGCTATCATTCAAGATGCCCTGCCGACAGTGGTCCAAAGATGGACCCCC
5601 CACCCACGAGGAGCATCGTGGAAAAGAAGACGTTCAACCACGTCTCAAAGCAAGTGGATTGATGTGATATCTCCACT
5681 GACGTAAGGGATGACGCACAATCCACTATCCTCGCAAGACCCCTCCTATATAAGGAAGTTCAATTGTTGACAACAAATGTAAGTGTGCCGGATTACTT
5761 GACACGCTGAAATCACCAGTCTCTCTAGAGTACCATGGAGAACCATTTGCTTCTGGGAGTCCTGGCGTTTAT
5841 TAAGGCTGTCATGTGAAAGCCCAAGAAGATGAAAGGATTGTTGTTGACAACAAATGTAAGTGTGCCGGATTACTT

5921 CCAGGATCATCGTTCTCCGAAGATCCTAATGAGGA.CATTGTGGAGAGAAACATCGAATTATTGTTCCCTCTGAACAAAC
6001 AGGGAGAATATCTCTGATCCCACCTCACCATTGAGAACCGAGATTTGTGTACCCATTGCTGACCTCTGTAAAAATGTGA
6081 TCCTACAGAAGTGGAGCTGGATAATCAGATAGTTACTGCTACCCAGAGCAATATCTGTGATGAAGACAGTGCTACAGAGA
6161 CCTGCTACACTTATGACAGAAACAAGTGCTACACAGCTGTGGTCCACTCGTATATGGTGGTGAGACCAAAATGGTGGAA
6241 ACAGCCTTAACCCCAGATGCCTGCTATCCTGACTGAATCCGCGGCATGAGCTAAGCTAGCTATATCATCAATTATGTA
6321 TTACACATAATATCGCACTCAGCTTTCATCTACGGCAATGTACCGCTGATATAATCAGTTATTGAAATATTCTGAAT
6401 TTAAACTGCATCAATAAAATTATGTTTTGCTTGGACTATAATACCTGACTTGTATTATCAATAAAATATTAAACT
6481 ATATTTCCTTCAAGAGCTCAAAATTGGATTGTAATAATAAAACGCAATTGTTGTTATTGTGGCGCTATCATAGATG
6561 TCGCTATAAACCTATTCAAGCACAATATATTGTTCATTTAATATTGTACATATAAGTAGTAGGGTACAATCAGTAAAT
6641 TGAACGGAGAATATTATTCAAAAAATACGATAGTAACGGGTGATATATTCAATTAGAATGAACCGAAACCGGGTAAGG
6721 ATCTGAGCTACACATGCTCAGGTTTTACAACGTGACAACAGAATTGAAAGCAAATATCATGCGATCATAGCGTCTC
6801 GCATATCTCATTAAAGCAGTGAATTCAAGATCGGCTGAGTGGCTCCTCAACGTTGCGGTTCTGTCAGTTCAAACGTAAA
6881 ACGGCTTGTCCCGCCTCATCGGCGGGTCATAACGTGACTCCCTTAATTCTCCGCTCATGATCAGATTGTCGTTCCCGC
6961 CTTCAAGTTAAACTATCAGTGTGACAGGATATATTGGCGGGTAAACCTAAGAGAAAAGAGCGTTATTAGAATAATCG
7041 GATATTAAAGGGCGTGAAAGGTTATCCGTTGTCCATTGTATGTGATGCCAACACAGGTTCCCCAGATCTGGC
7121 GCCGGCCAG